

APPENDIX

Clean copies of amended claims 1 and 9:

1. (currently amended) In a communication network comprising:
 - a plurality of local name servers, each of the local name servers being capable of answering name-to-address resolution queries by using temporarily stored information or by further querying other name servers,
 - at least one application server having at least one application server address and being capable of receiving requests for at least one service and performing the at least one service, wherein the at least one service has a service name,
 - a plurality of clients, each of the clients being associated with at least one of the local name servers, and being capable of querying the at least one associated local name server for an address of the at least one application server, to receive from the at least one associated local name server an answer specifying an address of the at least one application server, and to send a request for the at least one service to the at least one application server having the address specified in the answer,
 - and at least one authoritative name server, the at least one authoritative name server being capable of providing answers to name-to-address resolution queries from the local name servers, the content of every answer having a validity period,
 - a method for discovering associations between the clients and the local name servers, comprising the steps of:

producing a query record concerning a query from one of the local name servers received by the at least one authoritative name server and an answer to the query, the query record including:

- a first application server identifier of the at least one application server that is the answer to the query,
- a response timestamp expressing when the answer was issued,
- a validity period defined for the first application server identifier, and
- a local name server address of the local name server from which the query was received,

producing a request record concerning a service request issued by one of the clients for a service and received by the at least one application server, the request record including:

- a second application server identifier of the application server that received the service request,
- a request timestamp expressing when the service request was received, and
- a client address of the client that issued the service request; and

comparing query records and request records to find matching pairs of query records and request records, and associating the local name server address in the matching query record to the client address in the matching request record, a matching pair being defined as a first-identified pair of one of the query records and one of the request records for which the first application server identifier matches the second application server identifier and the response timestamp matches the request timestamp.

9. (currently amended) A system for discovering associations between clients and local name servers, comprising

- at least one name server monitor, the at least one name server monitor being
 - associated with an authoritative name server and configured to modify an answer to a domain name resolution query from at least one local name server, the modified answer including a monitoring address for an application server, and further configured to create query records,
- wherein each query record includes a local name server identifier, an application server identifier, and a response timestamp;
- at least one application server monitor, the at least one application server monitor
 - being associated with an application server and configured to receive a request from a client and pass the request to the associated application server, and further configured to create request records,
- wherein each request record includes a client identifier, an application server identifier of the associated application server, and a request timestamp; and
- at least one discovery and monitoring manager configured to compare the query records and the request records to discover the associations between the clients and the local name servers.